

Application No. 10/036,840  
Amendment dated June 30, 2006  
Reply to Office Action of March 31, 2006

### **REMARKS/ARGUMENTS**

Responsive to the Official Action mailed March 31, 2006, applicant has revised the claims of her application in an earnest effort to place this case in condition for allowance. Specifically, independent claim 1 and dependent claim 4 have been amended. Reconsideration is respectfully requested.

In the Action, the Examiner objected to applicant's previous Amendment, stating that it introduced new matter into the disclosure. In an effort to advance prosecution, applicant has revised the claims to remove reference to "a uniform admixture". However, it is respectfully noted that the disclosure in the present application of forming the present odor control compound by admixing a hydroxydiphenyl ether with a modified acetic carrier in an aqueous solution would be well understood by those skilled in the art to form a uniform admixture.

In the Action, the Examiner has rejected the pending claims under 35 U.S.C. §102 and §103, with reliance upon PCT publication No. WO 99/38541, to Nakamura, with further reliance upon U.S. Patent No. 6,287,634, to Beall et al. However, it is respectfully maintained that these references, even in combination, do not teach or suggest applicant's odor control absorbent article, and accordingly, the Examiner's rejections are respectfully traversed.

As disclosed in the application, the present invention is directed to the control of odors created by decomposition of human waste in a personal hygiene product. Control of the decomposition process is by the pre-application of an odor control compound, comprising an admixture of hydroxydiphenyl ether and an aliphatic acid carrier, as a coating on a surface of a base substrate material of the personal hygiene product.

By employing the hydroxydiphenyl ether/aliphatic acid carrier admixture in a personal hygiene product, the production of ammonia via urine decomposition, is significantly curtailed. The hydroxydiphenyl ether reduced the metabolic performance of bacteria present in the environment.

The presence of hydroxydiphenyl ether in a modified acetic carrier further improves the bacteriostatic performance of the ether, as well as introducing a pH shift that disfavors the further release of ammonia, by inducing protonation of the ammonia into a non-volatile ammonium ion. The working examples described in the present specification demonstrate these benefits and advantages of the present invention.

It is respectfully maintained that the primary Nakamura reference fails to teach an odor control absorbent article having an odor control compound comprising an admixture of hydroxydiphenyl ether and an aliphatic acid carrier, as presently claimed.

Nakamura describes an antimicrobial hydrogel-forming absorbent polymer ("A-HFAP") comprising a hydrogel-forming absorbent polymer ("HFAP") and an antimicrobial comprising a 1-hydroxy-2-pyrrolidone derivative represented by the formula (1) described therein (see page 6, lines 15-19; page 13, lines 26 *et seq.*; Abstract; claim 1).

Nakamura, at page 14, lines 11-35, indicates that the antimicrobial agent (i.e., 1-hydroxy-2-pyrrolidone derivative) may further comprise other antimicrobial chemicals including, amongst a listing of options, "phenolic", and later, amongst another lengthy list of possibilities of the phenolic compounds, "2,4,4'-trichloro-2'-hydroxydiphenyl ether" is identified. The "hydroxydiphenyl ether" described by Nakamura appears to be an optional ingredient, and

Nakamura nowhere suggests "hydroxydiphenyl ether", if selected, may be combined specifically with an aliphatic acid carrier to control odor as claimed in the present invention.

Nakamura's HFAP appears to be a *polymer* and not an organic acid. Nakamura's HFAP polymers may be *formed from* "[o]lefinically unsaturated sulfonic acid monomers" (page 8, lines 18-26). Example 1 of Nakamura appears to describe forming HFAP polymer particles from acrylic monomers. However, Nakamura states that the preferred polymer materials are cross-linked materials (pages 9-10; Example I).

In view of the foregoing, it is believed to be readily apparent that Nakamura clearly fails to identically disclose the present invention, and thus, cannot be properly relied upon to anticipate the presently pending claims.

In rejecting claims 6, 9, and 10 under 35 U.S.C. §103, the Examiner has further relied upon the Beall et al. reference. However, it is respectfully submitted that this reference fails to overcome the clear deficiencies in the teachings of the primary Nakamura et al. reference in teaching or suggesting the present invention as claimed.

Beall et al. describes compositions for application to skin or hair (column 3, lines 9-16), *and not for odor control of absorbent articles*. As such, Beall et al. fails to suggest combining hexanedioic acid with hydroxydiphenyl ether in particular, for any purpose, much less in an odor control article.

In view of the foregoing, formal allowance of claims 1, 3, 4, and 6-11 is believed to be in order and is respectfully solicited. Should the Examiner wish to speak with applicant's attorneys, they may be reached at the number indicated below.

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The Commissioner is hereby authorized to charge any additional fee which may be required in connection with this submission to Deposit Account No. 23-0785.

Respectfully submitted,

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I hereby certify that this AMENDMENT is being deposited with the United States Postal Service "Express Mail Post Office To Addressee" service under 37 CFR 1.10 addressed to Commissioner of Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, Express Mail Label No. EV 843640949 US on **June 30, 2006**.

  
Colleen Davison